

## WHAT IS CLAIMED:

1. A method for obtaining magnetic head positions in a magnetic data writing apparatus including (1) a spindle motor having a shaft mounting thereon a plurality of first magnetic disks, to which  
5 magnetic data is to be transferred, and a second magnetic disk storing at least in one major surface thereof original disk data including at least one of the magnetic data to be transferred to the first magnetic disks and magnetic data consulted in writing magnetic data to the first magnetic disks, the spindle motor rotating the first magnetic disks and the second  
10 magnetic disk as a unit, and (2) a rotary positioner on the periphery of the first and second magnetic disks, the rotary positioner stacking rotatably multiple sets of first magnetic heads, and a set of second magnetic heads for reading the original disk data from the second magnetic disk into a unit, the multiple sets of first magnetic heads including one set assigned  
15 to each disk surface of each first magnetic disk, each set of first magnetic heads including a predetermined number of the first magnetic heads for writing magnetic data to the disk surface to which the set is assigned, thereby to cause the first magnetic heads simultaneously to write the magnetic data determined based on the original disk data read out by the  
20 second magnetic heads from the second magnetic disk, to respective track ranges assigned thereto on the disk surfaces, the method comprising the steps of:

mounting third magnetic disks on the shaft of the spindle motor in place of the first magnetic disks prior to writing magnetic data to the first magnetic disks, the third magnetic disks storing calibration data on the surfaces thereof for facilitating accurate reading by the first magnetic  
5 heads of first addresses indicating the position addresses of the tracks and sectors at which the first magnetic heads are present; and

reading out second addresses included in the original disk data, by the second magnetic heads from the second magnetic disk, the second addresses indicating the position addresses of the tracks and sectors on  
10 the second magnetic disk where the second magnetic heads are present, and reading out the first addresses from the third magnetic disks simultaneously with reading out the second addresses, thereby to obtain relationships between the position address of each second magnetic head and corresponding position addresses of the first magnetic heads.

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2. The method according to claim 1, the method further comprising:

comparing the first address, which each of the first magnetic heads reads out while scanning the corresponding third disk surface including at  
20 least a track range assigned to the each of the first magnetic heads, and the second address corresponding to the first address, thereby to prepare an address lookup table indicating relationships between the position

addresses of the first magnetic heads and the position addresses of the second magnetic heads corresponding to the first magnetic heads; and

obtaining the first addresses of the first magnetic heads with reference to the address lookup table, the first addresses corresponding to  
5 the second addresses that the second magnetic head reads out from the second magnetic disk, thereby to cause each of the first magnetic heads to write the magnetic data to be transferred to the positions designated by the first addresses.

10 3. A method for obtaining magnetic head positions in a magnetic data writing apparatus including a spindle motor having a shaft mounting thereon a plurality of first magnetic disks, to which magnetic data is to be transferred, and a second magnetic disk storing at least in one major surface thereof original disk data including the magnetic data  
15 to be transferred to the first magnetic disks and/or the magnetic data consulted in writing magnetic data to the first magnetic disks, the spindle motor rotating the first magnetic disks and the second magnetic disk as a unit; and a plurality of rotary positioners on the periphery of the first and second magnetic disks, each of the rotary positioners stacking rotatably  
20 first magnetic heads making access to the respective surfaces of the first magnetic disks and a second magnetic head for reading the original disk data from the second magnetic disk into a unit, the first magnetic heads

on each surface of each of the first magnetic disks being assigned to the respective track ranges on the surface for writing magnetic data to the respective track ranges, the second magnetic heads being assigned to the respective track ranges on one surface of the second magnetic disk

5 corresponding to the track ranges of the corresponding first magnetic heads, thereby to cause the first magnetic heads simultaneously to write the magnetic data determined based on the original disk data, which the second magnetic heads read out from the second magnetic disk, to the respective track ranges assigned thereto on the respective surfaces of the

10 first magnetic disks, the method comprising:

mounting third magnetic disks on the shaft of the spindle motor in place of the first magnetic disks prior to writing magnetic data to the first magnetic disks, the third magnetic disks storing calibration data on the surfaces thereof for facilitating accurate reading by the first magnetic

15 heads of first addresses indicating the addresses of the tracks and sectors at which the first magnetic heads are present; and

reading out second addresses included in the original disk data, by the second magnetic heads from the second magnetic disk, the second addresses indicating the position addresses of the tracks and sectors on

20 the second magnetic disk where the second magnetic heads are present, and reading out the first addresses from the third magnetic disks simultaneously with reading out the second addresses, thereby to obtain relationships between the position address of each second magnetic head

and corresponding position addresses of the first magnetic heads.

4. The method according to claim 3, the method further comprising:

5 comparing the first address, which each of the first magnetic heads reads out while scanning the corresponding third disk surface including at least a track range assigned to the each of the first magnetic heads, and the second address corresponding to the first address, thereby to prepare an address lookup table indicating relationships between the  
10 position addresses of the first magnetic heads and the position addresses of the second magnetic heads corresponding to the first magnetic heads; and

obtaining the first addresses of the first magnetic heads with reference to the address lookup table, the first addresses corresponding to  
15 the second addresses that the second magnetic head reads out from the second magnetic disk, thereby to cause each of the first magnetic heads to write the magnetic data to be transferred to the positions designated by the first addresses.